ABSTRACT OF THE DISCLOSURE

An optically active fluorine-containing compound represented by the following formula (1):

$$O$$
 A
 R^1
 O
 O

5

10

15

20

wherein A is an oxygen atom, a sulfur atom or an NH group, and R^1 is a methyl group, an ethyl group, a C_{3-10} linear, branched or cyclic alkyl group, a C₆₋₂₀ aromatic group, a C_{6-20} aromatic group having hydrogen on the aromatic ring optionally substituted by a halogen atom, a C_{6-20} aromatic group having hydrogen on the aromatic ring optionally substituted by a methyl group, a C₆₋₂₀ aromatic group having hydrogen on the aromatic ring optionally substituted by an ethyl group, a C_{6-20} aromatic group having hydrogen on the aromatic ring optionally substituted by a C₃₋₆ linear, branched or cyclic alkyl group, a C_{6-20} aromatic group having hydrogen on the aromatic ring optionally substituted by a methoxy group, a C_{6-20} aromatic group having hydrogen on the aromatic ring optionally substituted by an ethoxy group, a C₆₋₂₀ aromatic group having hydrogen on the aromatic ring optionally substituted by a C₃₋₆ linear, branched or cyclic alkyloxy group, a C_{5-19} heteroaromatic group, a C5-19 heteroaromatic group having hydrogen on the aromatic ring optionally substituted by a halogen atom, a C₅₋₁₉

heteroaromatic group having hydrogen on the aromatic ring optionally substituted by a methyl group, a C_{5-19} heteroaromatic group having hydrogen on the aromatic ring optionally substituted by an ethyl group, a C₅₋₁₉ heteroaromatic group having hydrogen on the aromatic ring 5 optionally substituted by a C₃₋₆ linear, branched or cyclic alkyl group, a C₅₋₁₉ heteroaromatic group having hydrogen on the aromatic ring optionally substituted by a methoxy group, a C₅₋₁₉ heteroaromatic group having 10 hydrogen on the aromatic ring optionally substituted by an ethoxy group, a C_{5-19} heteroaromatic group having hydrogen on the aromatic ring optionally substituted by a C₃₋₆ linear, branched or cyclic alkyloxy group, a benzyl group, a benzyl group having hydrogen on the aromatic ring optionally substituted by a halogen atom, a benzyl 15 group having hydrogen on the aromatic ring optionally substituted by a methyl group, a benzyl group having hydrogen on the aromatic ring optionally substituted by an ethyl group, a benzyl group having hydrogen on the 20 aromatic ring optionally substituted by a C₃₋₆ linear, branched or cyclic alkyl group, a 2-phenylethyl group, or a C₃₋₁₀ linear, branched or cyclic alkyl group having a C₆₋₂₀ aromatic group bonded thereto, or by the following formula (2):

$$O_{1,1} \stackrel{\mathsf{CF}_{3}}{\longrightarrow} A_{R^{1}}$$

wherein A and R¹ are as defined above.